

REMARKS

The present invention is directed to an aqueous- or solvent-based, one component, polyurethane stoving coating composition comprising i) a polyisocyanate blocked with a CH-acidic ester, ii) an OH-containing polymeric compound, and iii) from 0.5 to 4.0 wt.%, based on the solids content of components i) and ii) of a tetravalent titanium compound. As disclosed in the present application, the titanium compound is a catalyst which allows for good crosslinking even at stoving temperatures of less than 100°C. In this regard, the Examiner's attention is respectfully directed to the comparative examples in the present application (see pages 8 through 12). As shown therein, the claimed tetravalent titanium compounds have a significant advantage over the other catalysts tested. When viewed in this light, it is clear that the references cited and relied upon by the Examiner do not fairly suggest the claimed invention.

Claims 1 through 5 were rejected under 35 U.S.C.103 as being unpatentable over the Squiller et al reference (U.S. patent 6,103,849) in view of the Okuno et al reference (U.S. patent 4,562,237) and the Konig et al reference (U.S. patent 6,060,573). Of the references cited by the Examiner, the Konig et al reference is the closest to the presently claimed invention.

The Konig et al reference describes a composition comprising i) a polyisocyanate blocked with a CH-acidic ester and iii) formaldehyde. In the working examples (see Example 3), the reference also describes the preparation of a coating composition which also contains an OH-containing polymeric compound (Desmophen A) and a tin catalyst (DBTL - dibutyltin dilaurate). The reference does not describe or suggest any tetravalent titanium compounds.

The Squiller et al reference describes compositions not even remotely close to the present invention. The compositions therein broadly comprise a) an isocyanate blocked with a phenol or an oxime, b) a polyketimine, polyenamine or an oxazolidine, and c) a compound which generate water under the curing conditions. The Examiner has indicated that ^{the} reference describes OH-containing compounds, citing column 6, lines 4-12. the examiner has apparently overlooked column 5, lines 45ff, wherein the reference indicates that instead of monomeric isocyanates, isocyanate prepolymers can be used. As disclosed therein, the prepolymers are

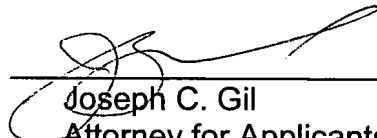
prepared by reacting isocyanates with the high molecular weight isocyanate-reactive materials disclosed in column 6, lines 4 -12. According to the reference, the isocyanate groups of the prepolymer are then blocked with a phenol or an oxime. The compositions of the present invention cure by release of the blocking agent and reaction of the resultant free isocyanate groups with the OH-containing polymeric compound. In the compositions of the Squiller et al reference, the curing mechanism is completely different.

The Okuno et al reference is even more remote than the Squiller et al reference. The organic titanate ester used in the compositions of the Okuno et al reference "serves to substantially improve the bonding when used in combination with the aminoalkoxysilane (a)" of the reference. The titanium compound of the reference has absolutely nothing to do with catalyzing a reaction between an isocyanate group and an OH group.

Reconsideration of the rejection is requested.

Respectfully submitted,

By



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